

POOR LEGIBILITY

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**FINAL EXPLANATION OF SIGNIFICANT DIFFERENCES
SITE 18 – REGIONAL VOLATILE ORGANIC COMPOUND
GROUNDWATER PLUME
(OPERABLE UNIT 1)
SITE 24 – VOC SOURCE AREA (OPERABLE UNIT 2A)
FORMER MCAS EL TORO, CALIFORNIA**

February 2006

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A Regulatory Comments
B Amended Settlement Agreement Among the SFA OCWD, and IRWD in Regard to Former MCAS El Toro Groundwater Remediation (with Revised Appendices 4 and 5)
C Updated Descriptions of the Modified IDP

ACRONYMS AND ABBREVIATIONS

ARAR	applicable or relevant and appropriate requirement
BCT	Base Realignment and Closure Cleanup Team
BRAC	Base Realignment and Closure
CCMI	CERCLA Component of the Modified Irvine Desalter Project
CFR	Code of Federal Regulations
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DOJ	Department of Justice
DON	Department of the Navy
DTSC	California Department of Toxic Substances Control
ESD	Explanation of Significant Differences
FFA	Federal Facilities Agreement
FS	feasibility study
IDP	Irvine Desalter Project
IRP	Installation Restoration Program
IRWD	Irvine Ranch Water District
MCAS	Marine Corps Air Station
MCL	maximum contaminant level
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
OCWD	Orange County Water District
OU	operable unit
PA	principal aquifer
PCE	tetrachloroethene
RAO	remedial action objective
RI	remedial investigation
RO	reverse osmosis
ROD	record of decision
RWQCB	California Regional Water Quality Control Board
SARA	Superfund Amendments and Reauthorization Act
SFA	settling federal agencies
SGU	shallow groundwater unit
SOCWA	South Orange County Wastewater Authority
SVE	soil vapor extraction
TCE	trichloroethene
U.S. EPA	United States Environmental Protection Agency
VOC	volatile organic compound

1.0 Introduction

This document is an Explanation of Significant Differences (ESD) to the Final Record of Decision (ROD) (DON 2002) for Installation Restoration Program (IRP) Site 18 - Regional Volatile Organic Compound (VOC) Groundwater Plume (Operable Unit [OU] 1), and Site 24 - VOC Source Area (OU 2A), at the former Marine Corps Air Station (MCAS) El Toro, California. The Final ROD for groundwater contamination at Sites 18 and 24 ("Final Groundwater ROD") was signed by the Department of Navy (DON) on 18 June 2002 pursuant to: DON's authority as the lead federal agency for Comprehensive Environmental Response Compensation and Liability Act (CERCLA) remedy selection at former MCAS El Toro; pursuant to Sections 104 and 120 of CERCLA; Executive Order 12580; and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 Code of Federal Regulations [CFR] part 300).

The purpose of this ESD is to describe and justify modifications to actions required at Sites 18 and 24 as specified in the Final Groundwater ROD. This ESD addresses the following changes to the CERCLA Component of the Modified Irvine Desalter Project (CCMI):

- Relocation of the VOC Treatment Plants for Shallow Groundwater Unit (SGU) and Principal Aquifer (PA) and Related Changes.
- Reconfiguration of Groundwater Extraction Well Locations and Extraction Rates in the PA and Related Changes.
- Alternative for Disposal of Treated SGU Groundwater to the Non-CERCLA Brine Line and Related Changes.

The preparation and public notice of this ESD is pursuant to: Section 117(c) of the CERCLA of 1980, as amended by the Superfund Amendment and Reauthorization Act of 1986 (SARA); and pursuant to 40 Code of Federal Regulations (CFR) Section 300.435(c)(2)(i).

This ESD includes a brief summary of the remedy selected in the Final Groundwater ROD, a description of the proposed changes, and a description of why the DON is making these changes to the selected remedy. This ESD was prepared according to United States Environmental Protection Agency (U.S. EPA) guidance document, *A Guide to Preparing Superfund Proposed Plans, Records of Decision and Other Remedy Selection Decision Documents* (U.S. EPA 1999).

The lead regulatory agency for this ESD is the U.S. EPA. In addition to the U.S. EPA, the California Regional Water quality Control Board (RWQCB) and the California Department of Toxic Substances Control (DTSC) oversee the site cleanup at former MCAS El Toro and have commented on this ESD. All comments are presented in Attachment A. The Final Groundwater ROD was signed by the U.S. EPA on June 25, 2002, DTSC on June 20, 2002, and RWQCB on June 24, 2002.

2.0 Summary of Site History, Contamination, and Selected Remedy

Former MCAS El Toro is located in a semi-urban/agricultural area of southern California, approximately 8 miles south of Santa Ana and 12 miles northeast of Laguna Beach (Figure 1-1). Former MCAS El Toro covers approximately 4,740 acres. Land use surrounding the former station includes commercial, light industrial, agricultural, and residential. Former MCAS El Toro was operationally closed on July 2, 1999, in accordance with the Base Realignment and Closure (BRAC) Act.

A Phase I Remedial Investigation (RI), a Phase II RI/Feasibility Study (FS), and various site-specific investigations and studies identified VOC contamination, mainly trichloroethene (TCE) and tetrachloroethene (PCE) in soil and groundwater, at the former station. VOC contamination migrated from the soil to the SGU at Site 24 and to the regional PA at Site 18, which is defined as the area where TCE concentrations are greater than 5 micrograms per liter ($\mu\text{g/l}$) in the PA and is located entirely off-station downgradient of Site 24 (Figure 1-2). Site 24 encompasses the VOC source area in the southwest quadrant of former MCAS El Toro (Figure 1-2).

Site 24 comprises soil and groundwater. The VOC source area at Site 24 was addressed in the Interim ROD (DON 1997) that documented selection of soil vapor extraction (SVE); the U.S. EPA presumptive remedy for VOC-contaminated soil, as the remedy. The remedy for soil was implemented in accordance with the Interim ROD and documented in the closure report (Earth Tech 2002) submitted to the regulatory agencies. The regulatory agencies concurred with the closure report, which concluded that the remedial action objectives (RAOs) for soil have been fulfilled. The ROD documenting no further action for Site 24 soils is in preparation (DON 2006).

The selected CERCLA remedy as described in the Final Groundwater ROD (DON 2002) includes the following:

- Construction, operation, and maintenance of a groundwater extraction system to remove VOCs from groundwater,
- Performance monitoring during the remedial action,
- Treatment of VOC-contaminated groundwater using air stripping and treatment of VOC vapors with granular activated carbon filters to meet air quality standards before discharge to the atmosphere,
- Confirmatory groundwater sampling at the end of the remediation to confirm that VOC concentrations meet federal and state cleanup levels,
- Institutional controls to prevent use of contaminated groundwater, protect equipment, and allow access to the DON, OCWD/IRWD, and regulatory agency personnel.

The RAOs established in the Final Groundwater ROD are as follows:

Site 18

- Reduce concentrations of VOCs in the area of concern in the SGU and in the PA downgradient of the source areas to federal or state cleanup levels,
- Contain migration of VOCs above cleanup levels in the PA,
- Prevent domestic use of groundwater containing VOCs at concentrations above cleanup levels.

Site 24

- Reduce concentrations of VOCs in the Site 24 SGU to federal or state cleanup levels,
- Prevent use of groundwater containing VOCs at concentrations above cleanup levels,
- Prevent VOCs at concentrations above cleanup levels from migrating beyond the SGU.

Settlement Agreement – The Orange County Water District (OCWD), Irvine Ranch Water District (IRWD), and the Settling Federal Agencies (SFA) comprised of the U.S. Department of Justice (DOJ) and DON reached a Settlement Agreement (DOJ 2001) regarding the Modified IDP to accept and treat groundwater from Site 24 and the PA for VOC removal. Treatment of extracted

groundwater contaminated with VOCs is considered the CCMI. Groundwater extracted from the SGU will be conveyed by DON to a point of connection to be located at the MCAS El Toro boundary. At the point of connection, IRWD will accept the water and transport it to the Modified IDP for treatment.

This Settlement Agreement was incorporated as part of the Final Groundwater ROD (DON 2002). The agreement provides that the United States will bear the VOC treatment costs, and OCWD and IRWD will continue to bear the costs associated with reclaimed water supply treatment requirements, including those for total dissolved solids and nitrates. The agreement specifies the quantity and quality of contaminated water that can be treated by the Modified IDP. These groundwater quality parameters are referred to as evaluation concentration levels (ECLs) and are tabulated in Appendix 2 of the Settlement Agreement; which is included as Attachment E in the Final Groundwater ROD (DON 2002).

3.0 Basis for the Document

This section presents information that supports changes to remedial actions required in the Final Groundwater ROD for Sites 18 and 24. The proposed changes were developed by DON, OCWD/IRWD, and the Federal Facilities Agreement (FFA) signatories in the course of development and review of an informal submittal titled *60% Supplemental Design Memorandum* (IRWD 2004). The proposed approach was also discussed with the BRAC Cleanup Team (BCT) members at the April 1, 2004 and October 21, 2004 BCT meetings.

To support the proposed design changes, IRWD conducted groundwater modeling to demonstrate that the proposed design revisions will not adversely affect the performance of the groundwater remedy as described in the Final ROD. The modeling analysis used the revised well locations, flow rates, and annual pumping durations for both the potable and non-potable groundwater extraction wells. The groundwater modeling results indicate that the proposed design and operational modifications will result in improved plume containment and reduction.

Following verbal regulatory agency and Navy concurrence with the proposed approach in the informal 60% design submittal, the Draft 90% Design Submittal and Draft Final 100% Design Submittal were prepared by IRWD (IRWD 2005a,b). This ESD contains the conforming changes in the cleanup approach to attain consistency between the ROD and the design reports. In addition, conforming changes have been incorporated into the Settlement Agreement for consistency.

4.0 Description of Significant Differences

The remedial action selected in the Final groundwater ROD for Sites 18 and 24 is being changed as described below. An ESD is the appropriate means to document these changes, because they involve changes to the remedy that do not fundamentally alter the scope, performance, or cost of the CERCLA remedy. The target cleanup goals of this ESD, as well as the method of treatment, remain the same as those originally documented in the Final Groundwater ROD. The overall scope with respect to cost, performance, and duration of this remedial action will remain the same. The remedy will still comply with the RAOs and applicable or relevant and appropriate requirements (ARARs) identified and documented in the Final Groundwater ROD. The changes achieve a consistent level of protection to human health and the environment as the selected remedy documented in the Final Groundwater ROD.

4.1 Relocation of the VOC Treatment Plants for the SGU and PA and Related Changes.

During the Remedial Design process, IRWD and OCWD determined that VOC impacted groundwater would not be subjected to desalting by reverse osmosis at the Modified IDP Central Treatment Plant. The reverse osmosis was part of the non-CERCLA component of the Modified IDP. Therefore, alternative locations for the SGU and PA VOC treatment plants were identified closer to the SGU and PA groundwater extraction wells. The SGU VOC treatment plant will be located adjacent to the former MCAS El Toro boundary, and the PA VOC treatment plant will be located at extraction well ET-1 (Figure 4-1). As a result, the pipeline conveying groundwater extracted from Wells IRWD-78, ET-1, and ET-2 to the PA VOC treatment plant will be revised as shown on Figure 4-1.

The relocation of the VOC treatment plants will increase efficiency in remedy implementation and operation, and will not fundamentally alter the scope, performance, or cost of the CERCLA remedy.

4.2 Revision of Groundwater Extraction Well Locations and Extraction Rates in the Principal Aquifer (PA) (Site 18).

During remedial design, IRWD identified nineteen potential sites for Well ET-2. Seventeen sites were eliminated based on site constraints or hydrogeologic unsuitability. The remaining two sites were eliminated due to public opposition. IRWD also evaluated all existing wells within the PA, and TIC-113 was selected as a suitable replacement well for ET-2 (Figure 4-1).

Groundwater extracted from Well ET-1 will be treated at the PA VOC treatment plant and distributed for IRWD's non-potable uses. Initially, extracted groundwater from Wells IRWD-78 and ET-2 (i.e., TIC-113) will be connected directly to the IRWD's non-potable water system. However, if VOC concentrations at these wells exceed their respective maximum contaminant levels (MCLs), the extracted groundwater will be conveyed to the PA VOC treatment plant for VOC removal.

Well ET-1 will be pumped 10 months per year instead of 6 months per year. In addition, extraction rates have been revised as follows:

Well Number	Original Flow Rate (gpm)	Revised Flow Rate (gpm)
IRWD-78	800	600
ET-1	1,000	1,000
ET-2	700	1,300
Total	2,500	2,900

Based on the groundwater modeling presented in the *60% Supplemental Design Memorandum* (IRWD 2004), the modified extraction well configuration and pumping rates will result in compliance with RAOs and ARARs as specified in the Final ROD, and will not fundamentally alter the scope, performance, or cost of the CERCLA remedy.

4.3 Alternative for Disposal of Treated SGU Groundwater to the Non-CERCLA Brine Line and Related Changes.

As described in the Final Groundwater ROD, the treated SGU water would be injected at IDP-1, or discharged to IRWD's non-potable system (Figure 4-1). An additional alternative is discharge into the non-CERCLA brine line (part of the non-CCMI potable reverse osmosis [RO] plant that will be connected to the South Orange County Wastewater Authority [SOCWA] ocean outfall).

The revised location for the SGU VOC Treatment Plant and alternative SGU disposal to the non-CERCLA brine line will require modifications to pumping and pipeline conveyance systems from the SGU VOC Treatment Plant to Injection Well IDP-1, and to the back-up connection to the SOCWA ocean outfall. Treated SGU water will not be connected to IRWD's non-potable system.

The SFA, OCWD, and IRWD have agreed to changes to the Settlement Agreement to reflect the design revisions described in this ESD. The amended Settlement Agreement provisions (with revised Appendices 4 and 5) are included in this ESD as Attachment B.

The revised system is shown in Figures 4-1 and 4-2 which hereby replaces the system as described in Sections 10.2 (CERCLA component) and 10.3 (non-CERCLA component), and shown on Figures 10-1 (PA well configuration), 10-2 (SGU well configuration), and 10-3 (conceptual treatment) of the Final ROD (DON 2002). Updated descriptions of the primary components of the Modified IPD are presented in Attachment C.

5.0 Support Agency Comments

Documentation of regulatory comment on the Draft ESD is provided in Attachment A. In summary, the U.S. EPA requested a change to the delegated signatory, and DTSC and RWQCB had no comments. The U.S. EPA signatory has been revised in accordance with their request. Correspondence from U.S. EPA (September 26, 2005), DTSC (September 19, 2005), and RWQCB (October 5, 2005) is presented in Attachment A.

6.0 Statutory Determinations

The remedy as changed pursuant to this ESD complies with CERCLA and the NCP, remains protective of human health and the environment, and complies with ARARs identified in the ROD.

7.0 Public Participation

This ESD will become part of the administrative record for the site (NCP, 40 CFR Section 300.825 (a)(2)). A notice of public availability and a brief description of the ESD will be published in a major local newspaper. The ESD is available for public review at the following locations:

- Heritage Park Regional Library
MCAS El Toro Information Repository
14361 Yale Avenue
Irvine, CA 92604
(949) 551-7151
Hours: Monday – Thursday: 10:00 A.M. to 9:00 P.M.
Friday and Saturday: 10:00 A.M. to 5:00 P.M.
Sunday: Noon to 5:00 P.M.
- MCAS El Toro Administrative Record File
BRAC Office, Building 307
Former MCAS El Toro
Contact Ms. Marge Flesch
(949) 726-5398

Mr. Darren Newton
Base Realignment and Closure Environmental Coordinator
Former Marine Corps Air Station El Toro

Date: _____

Kathleen Johnson, Chief
Federal Facility and Site Cleanup Branch
United States Environmental Protection Agency, Region 9

Date: _____

Mr. John E. Scandura, Chief
Southern California Operations
Office of Military Facilities
Department of Toxic Substances Control

Date: _____

Mr. Gerard Thibeault
Executive Officer
Regional Water Quality Control Board Santa Ana Region

Date: _____

Mr. Darren Newton
Base Realignment and Closure Environmental Coordinator
Former Marine Corps Air Station El Toro

Date: _____

Kathleen Johnson, Chief
Federal Facility and Site Cleanup Branch
United States Environmental Protection Agency, Region 9

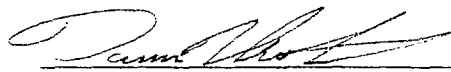
Date: _____

Mr. John E. Scandura, Chief
Southern California Operations
Office of Military Facilities
Department of Toxic Substances Control

Date: _____

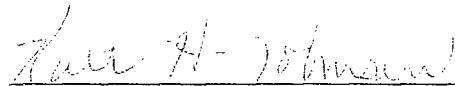
Mr. Gerard Thibeault
Executive Officer
Regional Water Quality Control Board Santa Ana Region

Date: _____



Mr. Darren Newton
Base Realignment and Closure Environmental Coordinator
Former Marine Corps Air Station El Toro

Date: Feb-6-06



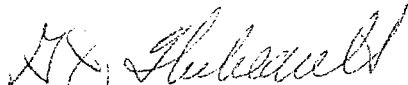
Kathleen Johnson, Chief
Federal Facility and Site Cleanup Branch
United States Environmental Protection Agency, Region 9

Date: 3/14/06



Mr. John E. Scandura, Chief
Southern California Operations
Office of Military Facilities
Department of Toxic Substances Control

Date: 3/20/06



Mr. Gerard Thibeault
Executive Officer
Regional Water Quality Control Board Santa Ana Region

Date: 3/28/06

8.0 References

Earth Tech, Inc. 2002. *Draft Final Site Closure Report, Vadose Zone Remediation, IRP Site 24, Volatile Organic Compounds Source Area, Former Marine Corps Air Station, El Toro, California*. June.

Irvine Ranch Water District (IRWD). 2004. *60% Supplemental Design Memorandum, Irvine Desalter Project*. Prepared by Tetra Tech, Inc., Irvine, California. October.

_____. 2005a. *Draft 90% Design Submittal, Irvine Desalter Project*. Prepared by Tetra Tech, Inc., Irvine, California. March.

_____. 2005b. *Draft Final 100% Design Submittal, Irvine Desalter Project*. Prepared by Tetra Tech, Inc., Irvine, California. May.

U.S. Department of Justice (DOJ). 2001. *Settlement Agreement Among the Settling Federal Agencies (SFA), Orange County Water District (OCWD), and Irvine Ranch Water District (IRWD) in Regard to Former Marine Corps Air Station (MCAS) El Toro Groundwater Remediation*.

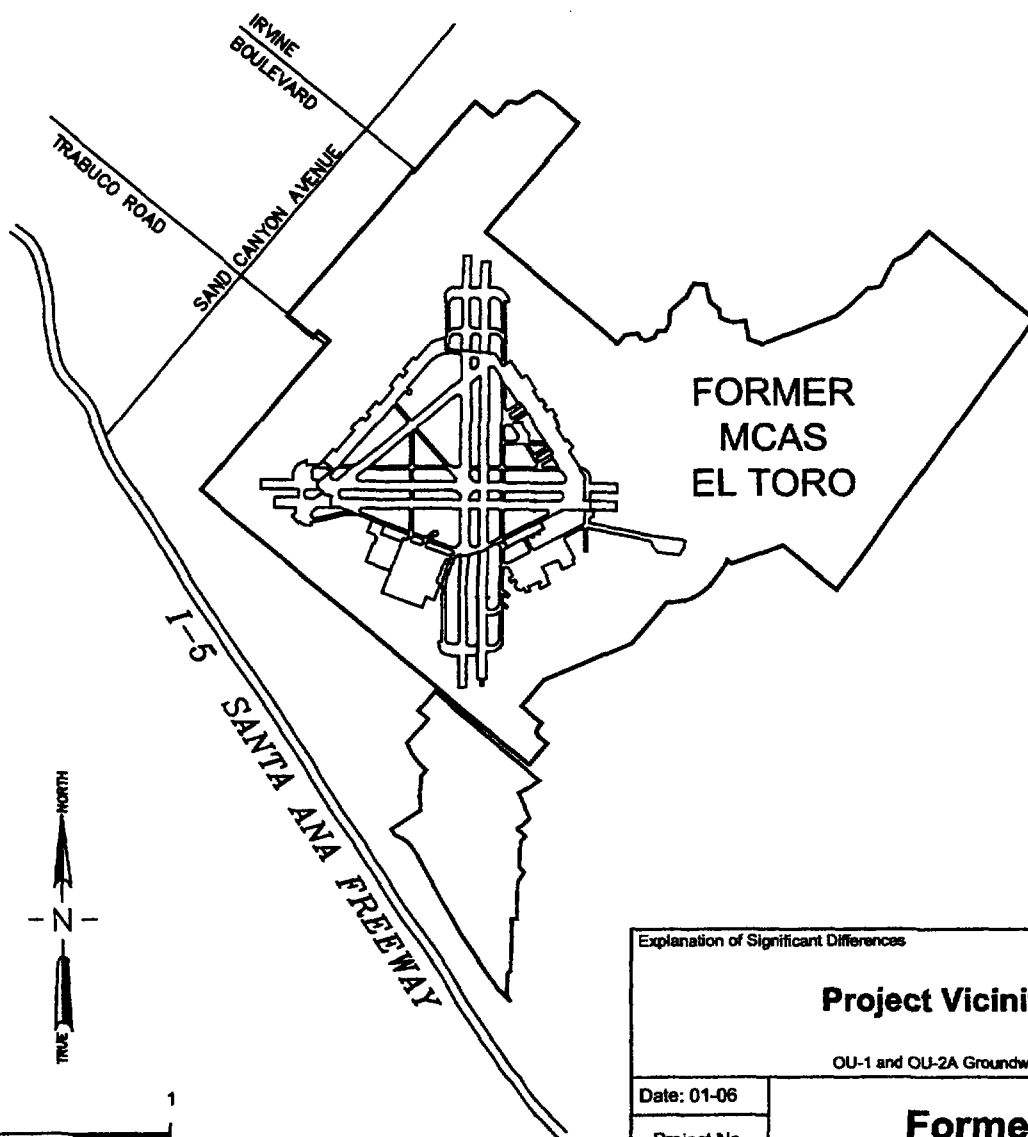
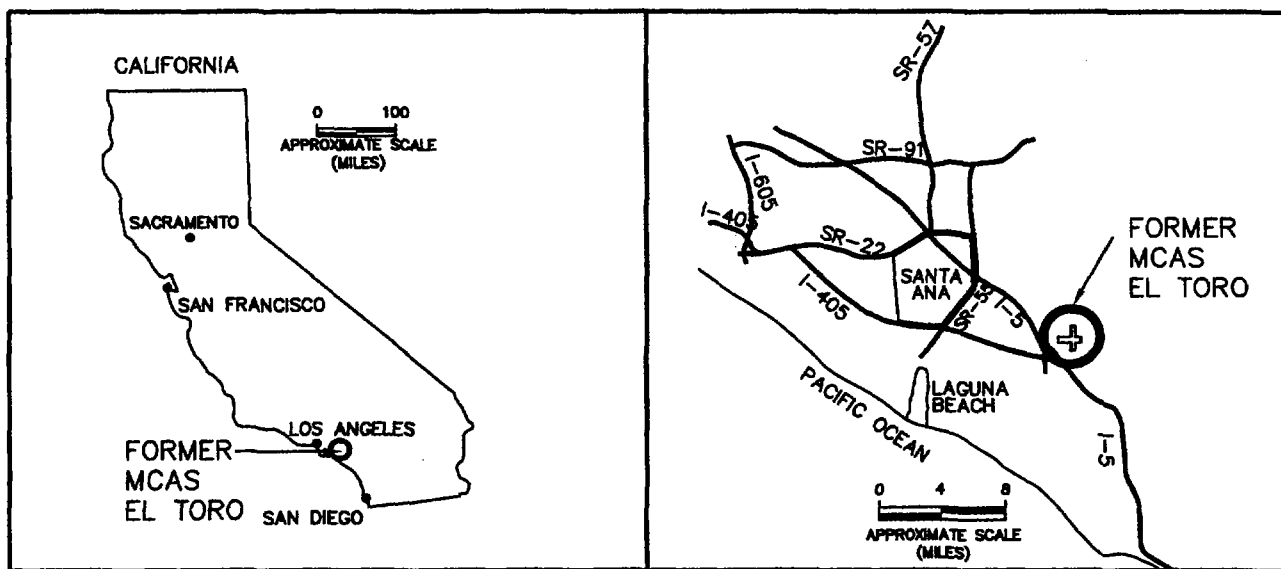
U.S. Department of the Navy (DON). 2006. *Draft Final Record of Decision, Operable Unit 2A, Site 24 – VOC Source Area Vadose Zone, Former Marine Corps Air Station El Toro, California*. Southwest Division Naval Facilities Engineering Command, San Diego, California. January.

_____. 2002. *Final Record of Decision, Operable Unit 1, Site 18 – Regional Volatile Organic Compound Groundwater Plume, Operable Unit 2A, Site 24 – VOC Source Area, Former Marine Corps Air Station El Toro, California*. Southwest Division Naval Facilities Engineering Command, San Diego, California. June.

_____. 1997. *Draft Final Interim Record of Decision, Operable Unit 2A – Site 24, VOC Source Area Vadose Zone, Marine Corps Air Station El Toro, California*. Southwest Division Naval Facilities Engineering Command, San Diego, California. September.

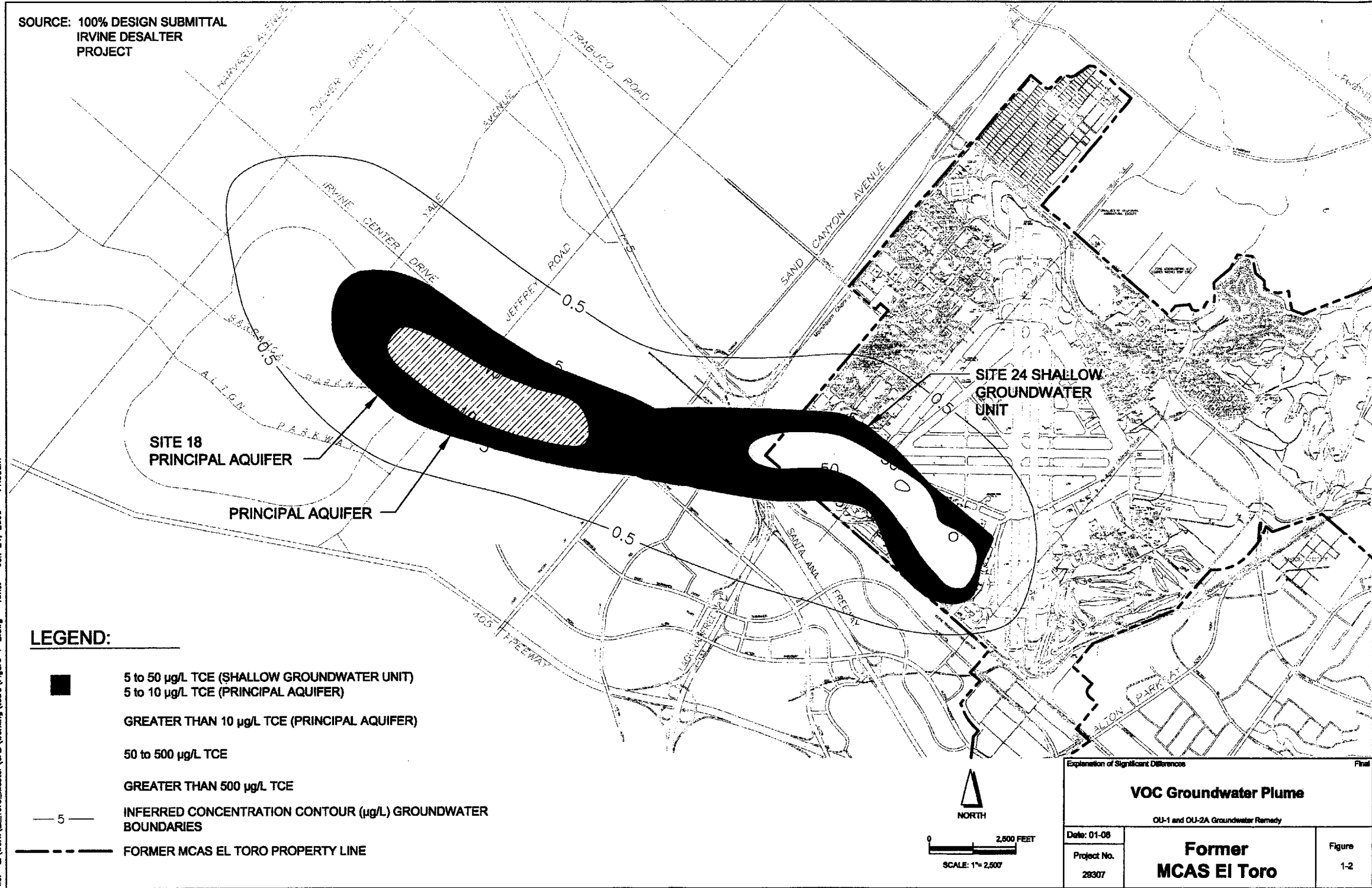
U.S. Environmental Protection Agency (U.S. EPA). 1999. *A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents*. EPA 540-R-98-031. July.

Figures

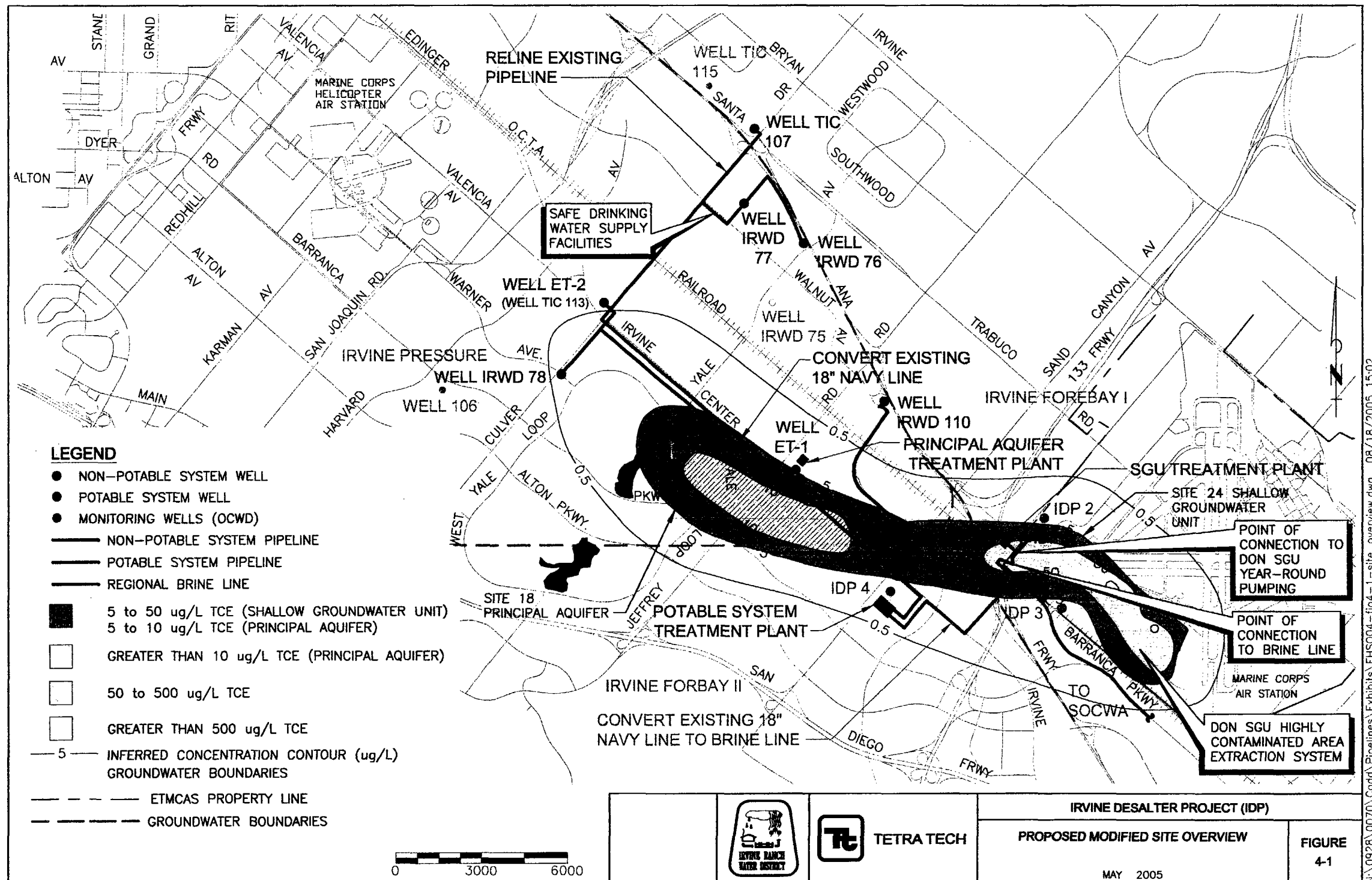


Explanation of Significant Differences			Final
Project Vicinity Map			
OU-1 and OU-2A Groundwater Remedy			
Date: 01-06	Former MCAS El Toro		Figure 1-1
Project No.			
29307			

SOURCE: 100% DESIGN SUBMITTAL
IRVINE DESALTER
PROJECT

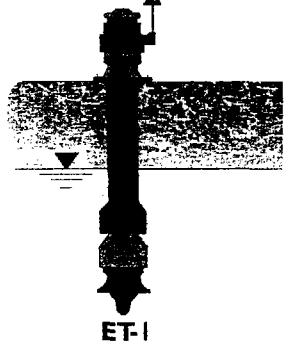
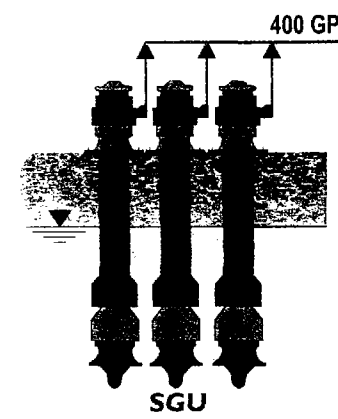


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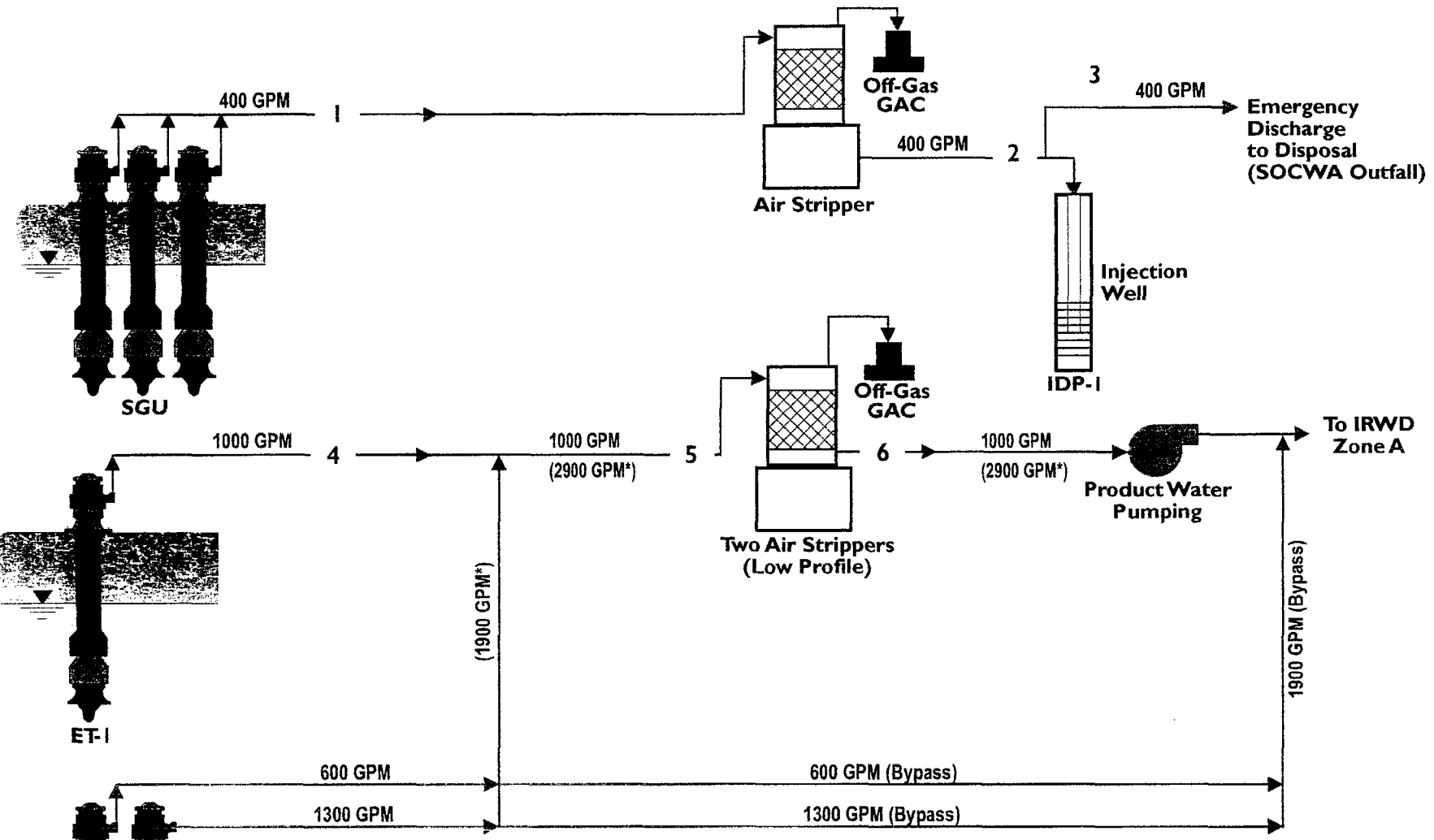
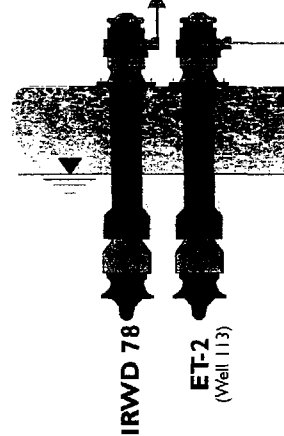


**Groundwater
Production**

Site 24
Shallow Ground Unit



Site 18
Principal Aquifer



* Potential Future Flows
Should IRWD 78 and/or ET-2
TCE Levels Exceed 5.0 µg/L

LEGEND

300 GPM - Nominal Flows

Attachment A
Regulatory Comments

From: Muza.Richard@epamail.epa.gov
Sent: Monday, September 26, 2005 8:38 AM
To: Newton, Darren CIV OASN (I&E) BRAC PMO West
Cc: Arnold, Content P CIV NAVFAC SW; jbroderic@rb8.swrcb.ca.gov; FCheng@dtsc.ca.gov
Subject: Sites 18 & 24 ESD

Darren

EPA has only one comment on the draft ESD for Sites 18 & 24.

For the signature page, the delegated EPA signature is:

Kathleen Johnson, Chief
Federal Facility & Site Cleanup Branch

I talked to Content on the phone last Thursday and gave her this comment then.

THANKS!

Rich

Rich Muza
Remedial Project Manager
U.S. EPA Region 9, SFD-8-1
75 Hawthorne Street
San Francisco, CA 94105
415-972-3349

From: Frank Cheng [FCheng@dtsc.ca.gov]
Sent: Monday, September 19, 2005 1:38 PM
To: muza.richard@epa.gov; Arnold, Content P CIV NAVFAC SW; Newton, Darren CIV OASN
(I&E) BRAC PMO West; jbroderic@rb8.swrcb.ca.gov
Subject: site 24 ESD

BCT,
We have no comments on the ESD. John Scandura will sign when it is finalized.

Frank Cheng, P.E.
Office of Military Facilities
Department of Toxic Substances
5796 Corporate Avenue
Cypress, California 90630
Phone: (714) 484-5395
Fax: (714) 484-5437



California Regional Water Quality Control Board
Santa Ana Region



Alan C. Lloyd, Ph.D.
Agency Secretary

3737 Main Street, Suite 500, Riverside, California 92501-3348
Phone (951) 782-4130 - FAX (951) 781-6288 - TTY (951) 782-3221
<http://www.waterboards.ca.gov/santaana>

Arnold Schwarzenegger
Governor

October 5, 2005

Base Realignment and Closure
Attn: Mr. Darren Newton
BRAC Environmental Coordinator
7040 Trabuco Road
Irvine, CA 92618

**COMMENTS ON DRAFT EXPLANATION OF SIGNIFICANT DIFFERENCES, SITE 18
- REGIONAL VOLATILE ORGANIC COMPOUND (VOC) GROUNDWATER PLUME
(OPERABLE UNIT 1), SITE 24 - VOC SOURCE AREA (OPERABLE UNIT 2A),
FORMER MARINE CORPS AIR STATION, EL TORO, SWRCB GEOTRACKER ID:
SLT8R2654056**

Dear Mr. Newton:

We have reviewed the above referenced document, dated August 2005, which we received on August 29, 2005. We have no comments.

For any questions, please call me at (951) 782-4494, or send email to jbroderick@waterboards.ca.gov.

Sincerely,


John Broderick
SLIC/DoD Section

cc via email: Mr. Richard Muza, US EPA, Region 9
Mr. Frank Cheng, DTSC, Office of Military Facilities
Ms. Content Arnold, NAVFACENGCOM, Southwest Division

received
10/11/05

California Environmental Protection Agency



Recycled Paper

Attachment B

**Amended Settlement Agreement Among the SFA
OCWD, and IRWD in Regard to Former MCAS El Toro
Groundwater Remediation (with Revised Appendices 4 and 5)**



U.S. Department of Justice

Environment and Natural Resources Division

Environmental Defense Section
P.O. Box 23986
L'Enfant Plaza Station
Washington, DC 20026-3986

Telephone (202) 514-2219
Facsimile (202) 514-4365

June 24, 2005

VIA FEDERAL EXPRESS

Mr. Joel D. Kuperberg
Rutan & Tucker
611 Anton Boulevard, 14th Floor
Costa Mesa, CA 92626

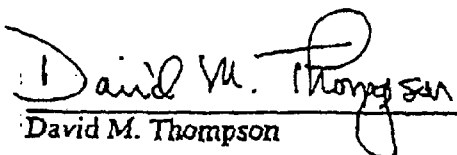
Ms. Joan Arneson
Bowie, Arneson, Wiles & Giannone
4920 Campus Drive
Newport Beach, CA 92660

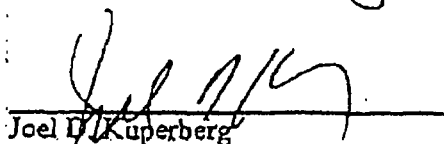
Re: OCWD/TRWD/EL TORO

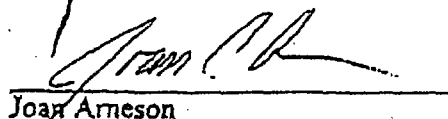
Dear Mr. Kuperberg and Ms. Arneson:

In accordance with Section VII.N. of the original 2001 Settlement Agreement, my understanding is that the parties have agreed on the enclosed, which in effect in its totality is the Second Amendment to the Settlement Agreement. My understanding also is that the part of the enclosed entitled "Settlement Agreement" should replace the original Settlement Agreement through page 32 of the original and that the enclosed Appendices 4 and 5 should replace the original of those two Appendices. Finally, my understanding is that, notwithstanding the foregoing, nothing in the enclosed Second Amendment is intended to modify anything in the 2003 First Amendment to the Settlement Agreement.

If your understanding conforms to all of the above, please sign below and return a signed copy to me. I then shall send each of you a copy signed by all three of us.


David M. Thompson


Joel D. Kuperberg


Joan Arneson

**SETTLEMENT AGREEMENT
AMONG THE SETTLING FEDERAL AGENCIES (SFA),
ORANGE COUNTY WATER DISTRICT (OCWD), AND
IRVINE RANCH WATER DISTRICT (IRWD)
IN REGARD TO FORMER MARINE CORPS AIR STATION (MCAS) EL TORO
GROUNDWATER REMEDIATION**

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SETTLEMENT AGREEMENT AMONG THE SETTLING FEDERAL AGENCIES (SFA),
ORANGE COUNTY WATER DISTRICT (OCWD), AND
IRVINE RANCH WATER DISTRICT (IRWD)
IN REGARD TO FORMER MARINE CORPS AIR STATION (MCAS) EL TORO
GROUND WATER REMEDIATION

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AGREEMENT

This Settlement Agreement (hereinafter referred to as "Settlement Agreement" or "Agreement") is made and entered into by and among the Orange County Water District ("OCWD"), a Special Governmental District organized under and existing pursuant to the Orange County Water District Act, Ch. 924, Stats. 1933, as amended, the Irvine Ranch Water District ("IRWD"), and the Settling Federal Agencies ("SFA") (defined as including the United States, its agencies, departments, and instrumentalities and hence including the Department of the Navy ["DoN"] but excluding the United States Environmental Protection Agency in its regulatory capacity), concerning water supply development and groundwater remediation in areas on and adjacent to the former United States Marine Corps Air Station ("MCAS") El Toro facility in Orange County, California.

RECITALS

A. WHEREAS, the former MCAS El Toro facility has been placed by the United States Environmental Protection Agency ("USEPA") on the National Priorities List ("NPL") promulgated by USEPA pursuant to Section 105 of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended, ("CERCLA"), 42 U.S.C. Section 9605;

B. WHEREAS, DoN, of which the United States Marine Corps ("USMC") is a component, USEPA, and the State of California Environmental Protection Agency ("CALEPA") have entered into a Federal Facility Agreement ("FFA") pursuant to Section 120 of CERCLA, 42 U.S.C. Section 9620, requiring that DoN, through the USMC, investigate and remediate releases of hazardous substances at the former MCAS El Toro NPL site ("Site") (a copy of the FFA is attached as Appendix 1);

C. WHEREAS, pursuant to the FFA, DoN has prepared Work Plans for Remedial Investigation/Feasibility Studies ("RI/FSs") for Operable Units 1 and 2A of the Site ("OU1" and "OU2A"), and these Work Plans have been approved by USEPA and CALEPA and require that DoN investigate and characterize the nature and extent of DoN's releases of hazardous substances, pollutants or contaminants to groundwater at the Site, and that DoN evaluate remedial alternatives addressing such releases;

D. WHEREAS, OCWD is a local government agency and political subdivision of the State of California and has the statutory authority and duty to manage, regulate, replenish, and protect the quality of the groundwater supplies within its boundaries for the beneficial use of the approximately two million (2,000,000) residents and water users who rely upon those groundwater resources to satisfy all or a portion of their beneficial water needs;

E. WHEREAS, IRWD is a California Water District formed and existing pursuant to California Water Code Section 34,000, et seq., and owns and operates a water distribution system for the purpose of distributing and selling potable and non-potable water to its customers and water users within its service area (the City of Irvine and other lands within the central portion of Orange County, California within the boundaries of OCWD jurisdiction);

F. WHEREAS, it is OCWD's and IRWD's position that the releases of volatile organic compounds ("VOCs") to soil and groundwater from DoN's operations at the Site have interfered with the ability of OCWD and IRWD to manage and use such groundwater;

G. WHEREAS, OCWD and IRWD have proposed a water supply development project (hereinafter referred to as the Irvine Desalter Project or "IDP") serving the following purposes: (1) interception, containment, and treatment of total dissolved solids ("TDS") and nitrate contaminant plumes in deep groundwater referred to as the "Principal Aquifer" ("PA")

originating from agricultural and natural sources; and (2) development of a water supply system drawing from the PA for the beneficial use of their customers;

H. WHEREAS, OCWD/IRWD modified the original purposes and design of the IDP (the Modified IDP) by planning for the design, construction, and operation of two separate groundwater pump-and-treat systems: 1) a Non-Potable System which incorporates containment, extraction, and treatment of groundwater from within the VOC contaminant plume addressed in DoN's proposed remedial action for OUI and OU2A and 2) a Potable System which will be constructed and operated outside of the VOC contaminant plume (see the attached Appendix 4 for a general description of the Modified IDP and its components and assets and the attached Appendix 5 for a general map);

I. WHEREAS, OCWD and IRWD have elected to proceed with the Modified IDP contingent upon the United States' financial participation to address VOC-related CERCLA costs at the Modified IDP Non-Potable System, with OCWD and IRWD bearing all other Modified IDP costs including, but not limited to, cost related to the remediation/treatment of non-VOCs including, but not limited to, TDS and nitrates (e.g., the cost of reverse osmosis treatment), the cost of water supply infrastructure development, and the cost of pipelines from the Modified IDP to irrigation or other discharge of treatment groundwater, except as otherwise provided in this Agreement;

J. WHEREAS, Former MCAS El Toro has been closed pursuant to the Defense Base Closure and Realignment Act, P.L. 101-510, 104 Stat. 1808 (10 U.S.C. Section 2687), and DoN believes it is in the public interest to arrange with local government for the construction and long-term operation of certain components of Former MCAS El Toro remedial action;

K. WHEREAS, DoN supports the Modified IDP to the extent that it addresses VOC contamination, provides for the beneficial use of treated groundwater, and allows mutual cost savings through the United States' compensation of OCWD and IRWD for the VOC treatment and related expenses and through avoidance of reinjection costs.

L. WHEREAS, DoN has developed a number of remedial alternatives to address the VOC contamination in the groundwater zones underlying the Site, the SGU, and the PA;

M. WHEREAS, DoN's remedial alternatives for the PA are presented in, among other documents, the nine-volume MCAS El Toro OU-1 RI/FS Report dated August 9, 1996, which includes the OU1 IAFS Interim Action Feasibility Study] Report (Vol. IV) and the OU1 IAFS Addendum (Vol. IX), and the CERCLA Proposed Plan for Remedial Action at OU1/OU2A; and DoN's remedial alternatives for the SGU are presented in, among other documents, the single volume MCAS El Toro OU2A FS Report dated December 5, 1997;

N. WHEREAS, DoN's preferred remedy for the PA is Alternative 8A (as described in the CERCLA Proposed Plan for Remedial Action at OU1/OU2A), and DoN's preferred remedy for the SGU is Alternative 10B' (as described in the "Simulation of Remedial Alternatives" section of Appendix D of the OU2A FS Report);

O. WHEREAS, DoN will draft and request that USEPA and CALEPA concur upon the issuance of a Proposed Plan and Record of Decision (the "ROD") identifying and selecting Alternative 8A and Alternative 10B' as remedial action for groundwater at OU1 and OU2A, respectively;

P. WHEREAS, remedial action is comprised of the following basic assets of the Modified IDP Non-Potable System (hereinafter

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Alternative 10B' combined

referred to as the "CERCLA Component of the Modified IDP" or "CCMI"(see the attached

Appendices 4 & 5):

a. OCWD/IRWD Assets (to be owned/operated by OCWD/IRWD, with response costs to be reimbursed by the United States pursuant to this Agreement):

1. Non-Potable System Principal Aquifer (PA) VOC treatment plant (including air strippers and off-gas granular-activated carbon units) for VOC-contaminated groundwater extracted from PA groundwater.

2. Non-Potable System Shallow Groundwater Unit (SGU) VOC treatment plant (including air strippers and off-gas granular-activated carbon units) for VOC-contaminated groundwater extracted from SGU groundwater.

3. Non-Potable System PA and SGU treatment plant sites' real property, buildings, site improvements, telemetry, transformers and other electrical improvements, and monitoring and control systems.

4. Extraction Wells IRWD-78, ET-1, and ET-2, and Injection Well IDP-1.

5. Pumping and pipeline conveyance system from Wells IRWD-78, ET-1, and ET-2 to the Non-Potable System PA VOC treatment plant (reference red line on Appendix 5 map).

6. Pumping and pipeline conveyance system from the Non-Potable System SGU VOC treatment plant to Injection Well IDP-1 and to connection to the brine line (reference red line on Appendix 5 map).

7. Monitoring Wells IDP-2, IDP-3 and IDP-4.

b. DON Assets (to be designed, constructed, owned/operated and paid by DON):

1. DON's extraction wells for interception and removal of VOC-contaminated groundwater in the SGU.

2. DON's SGU pumps, tank, site improvements, telemetry, transformers and other electrical improvements, and monitoring and control systems (including data link).

3. DON's pumping and pipeline conveyance from those SGU extraction wells to the DON SGU plant and from the DON SGU plant to the pipeline conveyance system's point of connection at the former MCAS El Toro station boundary.

4. DON's monitoring wells associated with the remediation of the VOC plume in the

SGU and PA.

Q. WHEREAS, past and future response costs incurred and to be incurred for construction, operation, and maintenance have been identified for the CCMI;

R. WHEREAS, in a settlement agreement dated August 4, 1993, the United States

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Inserted: 3. DON's monitoring wells associated with the remediation of the VOC plume in the SGU and PA.
Deleted: PA Assets (Alternative 8A), with response costs to be reimbursed by the United States pursuant to this Agreement, consisting of: <#>Extraction Wells IRWD-78, ET-1, and ET-2, and Injection Well IDP-1 located within the VOC plume in the PA. <#>Pumping and pipeline conveyance system from Wells IRWD-78, ET-1, and ET-2 to the CERCLA VOC treatment system located at the Central Treatment Plant (reference red line on Appendix 5 map), and the pumping and pipeline conveyance system from the CERCLA Non-Potable VOC treatment system located at the Central Treatment Plant to Injection Well IDP-1 (reference blue line on Appendix 5 map). <#>Separate CERCLA Non-Potable VOC treatment system (including air strippers and off-gas granular-activated carbon units) located at the Central Treatment Plant for VOC-contaminated groundwater extracted from both SGU and PA groundwater. 2. SGU Assets (Alternative 10B) designed, constructed, operated and paid by DON, consisting of: <#>DON's extraction wells for interception and removal of VOC-contaminated groundwater in the Shallow Groundwater Unit (SGU). <#>DON's pumping and pipeline conveyance from those extraction wells to the Non-Potable pipeline conveyance system's point of connection at the former MCAS El Toro station boundary. 3. Shared CCMI/non-CCMI Component Assets at the Central Treatment Plant (see Appendix 4 for brief
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resolved its alleged liability for response costs incurred in constructing ten groundwater monitoring wells (MCAS Nos. 1 through 10), and in exchange for the United States' reimbursement of those response costs, the United States was fully and forever released from liability for those costs;

S. WHEREAS, in a settlement agreement dated September 3, 1996, the United States resolved its alleged liability for response costs incurred in constructing and operating groundwater extraction well ET-1 through December 31, 1995, and in exchange for the United States' reimbursement of those response costs, the United States was fully and forever released from liability for those costs;

T. WHEREAS, the past response costs incurred and future response costs to be incurred by OCWD/IRWD as set forth in Whereas Clause Q in these Recitals in constructing, operating, and maintaining and otherwise implementing the CCMI component of the remedial action required in the anticipated ROD are necessary costs consistent with the National Oil and

Hazardous Substances Pollution Contingency Plan (NCP) based upon currently available information; and

U. WHEREAS, the parties agree that this Settlement Agreement is fair, reasonable, and in the public interest;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants set forth herein, the Parties mutually agree as follows:

I. GENERAL.

A. Resolution. The SFA, OCWD, and IRWD desire to amicably resolve and settle any and all past, present and future claims or causes of action that OCWD and IRWD may have against the United States under Sections 107 and 113 of CERCLA, 42 U.S.C. Sections 9607 & 9613, and all other applicable Federal, State or local laws or regulations for response costs incurred and to be incurred by OCWD and IRWD for groundwater remediation and water supply development projects as a result of the actual or threatened release of hazardous, toxic, or solid wastes, substances, pollutants or contaminants at or from Former MCAS El Toro without litigation and without admission of fact or liability by the United States, OCWD, or IRWD.

B. Efficacy of This Settlement Agreement. The Parties' obligations under this Settlement Agreement shall become effective upon signature by all the parties; furthermore, the Parties' obligations hereunder shall commence immediately (or shall commence as specified herein) and shall continue to completion if: (1) the ROD has received concurrence from USEPA and CALEPA or otherwise has become finalized as provided under the FFA (Attachment 1), and (2) Alternative 8A and Alternative 10B' are selected for OUI and OU2, respectively. If the ROD is not so finalized or if a remedial action is selected for groundwater at OUI and OU2A other than Alternative 8A for OUI and Alternative 10B' for OU2A, this Settlement Agreement

shall be null and void, and OCWD/IRWD shall receive no payments under or as a result of this Settlement Agreement. ~~Alternatives 8A and 10B were selected in the ROD. Design revisions reflect that this Agreement will be reflected in an Explanation of Significant Differences, which shall be sufficient to satisfy the ROD finalization requirements of this Agreement.~~

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C. Reservation. DoN fully reserves its rights to select and USEPA fully reserves its rights to concur upon remedial actions as provided by CERCLA, the NCP, and the FFA.

II. DEFINITIONS.

Unless otherwise expressly provided herein, terms used in this Agreement that are defined in CERCLA or in regulations promulgated under CERCLA have the meaning assigned to them in CERCLA or in such regulations. Whenever terms listed below are used in this Agreement or in the Appendices attached hereto and incorporated hereunder, the following definitions will apply and will control over any other definition:

"Agreement" or "Settlement Agreement" means this Settlement Agreement, including all Appendices hereto. In the event of a conflict between this Settlement Agreement and any Appendix, the body of this Settlement Agreement will control.

"Alternative 8A" means the remedial alternative of that name as described in the CERCLA Proposed Plan for Remedial Action at OU1/OU2A.

"Alternative 10B" means the remedial alternative of that name as described in the OU2A FS Report dated December 5, 1997.

"CALEPA" means the California Environmental Protection Agency and its departments, agencies, boards, bureaus, and other components and their successors.

"CCMI means the "CERCLA Component of the Modified IDP" as more fully set forth in Whereas Clause P. of the Recitals.

"Claim" means any past, present or future claim against the United States for contribution, cost recovery or other liability or financial payment with respect to any past,

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present, or future civil claim, counterclaim, cross claim, indemnity, demand, liability, duty, damage, debt, lien, loss, judgment, cause of action, or other chose in action, administrative or judicial, at law or in equity, under Federal, State, or local law, whether known or unknown, fixed or contingent, suspected or unsuspected or associated in any way with or pertaining to the actual or threatened release of hazardous, toxic, or solid wastes, substances, pollutants, or contaminants at or from Former MCAS El Toro, or associated in any way with the CERCLA remedial action addressed in the ROD or the Modified IDP.

"Day" means a calendar day unless expressly stated to be a working day. "Working day" means a day other than a Saturday, Sunday, or federal holiday. In computing any period of time under this Agreement, where the last day would fall on a Saturday, Sunday or federal holiday, the period will run until the close of business of the next working day.

"DoN" means the United States Department of the Navy and all of its components, agencies, and bureaus, including but not limited to the United States Marine Corps, the Naval Facilities Engineering Command, and their successors.

"Evaluation Concentration Levels" or "ECLs" as set forth in Appendix 2 will be used as evaluation criteria for Temporary Shutdown procedures under Paragraphs III.A.4.b and III.B.3.

"Federal Facility Agreement" or "FFA" means the agreement attached as Appendix 1.

"FFA Deliverables" means the documents that DoN is obligated to prepare pursuant to the FFA, as identified in Sections 7.3 and 7.4 of the FFA.

"Former MCAS El Toro" means the former Marine Corps Air Station El Toro located in Orange County, California.

"Future Response Costs" means all necessary response costs that OCWD and IRWD incur that are consistent with the NCP after the effective date of this Agreement in conducting

the Work under this Agreement relating in any way to any claims that OCWD or IRWD may have against the United States concerning the subject matter of this Agreement.

"IRWD" means the Irvine Ranch Water District and its successors.

"Modified IDP" means the Irvine Desalter Project as modified to accept and treat for VOC removal some of the groundwater that DoN must remediate as part of DoN's remedial action for groundwater at OUI and OU2A, as more particularly described in Appendix 4.

"OCWD" means the Orange County Water District and its successors.

"Off-station" means locations outside the security fence lines of Former MCAS El Toro on the effective date of this Agreement as indicated on the appended map (Appendix 5).

"On-station" or "Station" means locations inside the security fence lines of Former MCAS El Toro on the effective date of this Agreement as indicated on the appended map (Appendix 5).

"Operate and Maintain" and "Operation and Maintenance" means operation and maintenance of the CCMI pursuant to the Operation and Maintenance Plan to be developed by * OCWD/IRWD and to receive concurrence from USEPA and CALEPA or otherwise finalized pursuant to the FFA.

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"OU1" (Site 18) means DoN's remedial action to address the release of VOCs from Former MCAS El Toro into regional groundwater, as more particularly described in Vol. IV, Sections 1.5 and 1.5.2 of the OUI Interim RI/FS Report dated August 9, 1996.

"OU2A" (Site 24) means DoN's remedial action to address the release of VOCs from the former MCAS EL Toro VOC source area into the SGU₅ as more particularly described in the OU2A FS Report.

"Paragraph" means a discrete segment of this Agreement preceded by a letter or an Arabic numeral, as distinguished from a "Section," which refers to a discrete segment of this Agreement preceded by a Roman numeral.

"Party" means OCWD, IRWD, or the SFA, and "Parties," means OCWD, IRWD, and the SFA, including its officers, employees, agents, and contractors.

"Past Response Costs" means all necessary response costs that OCWD and IRWD incurred that are consistent with the NCP on or prior to the effective date of this Agreement relating in any way to any claims that OCWD or IRWD may have against the United States concerning the actual or threatened release of hazardous, toxic, or solid wastes, substances, pollutants, or contaminants at or from Former MCAS El Toro including but not limited to CERCLA response costs.

"Permanent Termination" means the permanent cessation of construction and /or operation of the OCWD/IRWD Assets of the CCMI by OCWD or IRWD for any reason.

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"Principal Aquifer" or "PA" means groundwater in the lowermost unconsolidated sediment layers beneath and extending beyond Former MCAS El Toro, generally below the level of the SGU, as more fully described in Section 1.7.1 (Geologic Framework) of the OU1 IAFS Report (Vol. IV).

"Record of Decision" or "ROD" means concurrence from USEPA and CALEPA or other FFA finalization of the ROD that DoN is expected to issue in calendar year 2001, selecting Alternative 8A and Alternative 10B' as the former MCAS El Toro Remedial Action for groundwater at OU1 and OU2A, respectively. Subject to Paragraph I.C., above, a Record of Decision selecting any alternative other than or altering Alternative 8A (described in the CERCLA Proposed Plan for Remedial Action at OU1/OU2A and Whereas Clauses N and P in

the Recitals hereof) and Alternative 10B' (described in the OU2A FS Report dated December 5, 1997, and Whereas Clauses N and P hereof) is not, for purposes of this Agreement, the ROD.

"Remedial Goals" means federal and any more stringent State drinking water maximum contaminant levels (MCLs).

"Section" means a discrete segment of this Agreement preceded by a Roman numeral, as distinguished from a "Paragraph," which refers to a discrete segment of this Agreement preceded by a letter or an Arabic numeral.

"Settling Federal Agencies" or "SFA" means the United States, including its agencies, departments, and instrumentalities and hence including DoN, but excluding USEPA in its regulatory capacity.

"Shallow Groundwater Unit" or "SGU" means groundwater in the uppermost~~x~~ unconsolidated sediment layers beneath and extending beyond Former MCAS El Toro, as more fully described in Section 1.7.1 (Geologic Framework) of the OU1 IAFS Report (Vol. IV).

"Site" means the former MCAS El Toro NPL site.

"State" means the State of California.

"Temporary Shutdown" means the temporary cessation of operation of the OCWD/IRWD Assets of the CCMI by OCWD and/or IRWD.

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"United States" means the United States of America including its agencies, departments, and instrumentalities.

"USEPA" means the United States Environmental Protection Agency and any successor departments or agencies of the United States.

"VOC Plume" means that plume of VOC-contaminated groundwater as described in the OU1 IAFS Report (Vol. IV) and the OU2A FS Report.

III. OCWD/IRWD AGREEMENT TO DESIGN, CONSTRUCT, OPERATE, AND MAINTAIN THE CCMI.

A. OCWD's and IRWD's Obligations To Design, Construct, and Operate and

Maintain OCWD/IRWD Assets of the CCMI,

Deleted: the Principal Aquifer Components of the CCMI.

→ 1. OCWD and IRWD are jointly and severally responsible for and will design, construct, operate and maintain the OCWD/IRWD Assets of the CCMI in accordance with this Agreement, the ROD and the requirements set forth in the former MCAS El Toro FFA and FFA deliverables set forth in Section 8.2 of the FFA that receive concurrence from USEPA and CALEPA or otherwise become finalized pursuant to the FFA including, but not limited to, the schedules set forth therein.

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2. This Agreement does not alter DoN's obligations to comply with the ROD, FFA and FFA deliverables as provided by law.

3. OCWD/IRWD will not modify the design or operation of the OCWD/IRWD Assets of the CCMI except as set forth in the finalized FFA deliverables and ROD.

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4. Response to Additional Contamination.

a. Except as otherwise provided in this Agreement or in connection with short term routine maintenance, the parties agree that payments made to OCWD/IRWD by the United States under this Agreement are made with the express assumption and understanding that OCWD/IRWD will provide uninterrupted operation of the OCWD/IRWD Assets of the CCMI. OCWD/IRWD will not temporarily shut down or permanently terminate operations of the OCWD/IRWD Assets of the CCMI except in accordance with the procedures set forth below. For purposes of this Agreement, DoN acknowledges that annual extractions from the principal aquifer component of the CCMI may be seasonal. Such extractions shall be consistent with the final ROD and FFA deliverables.

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This shall be deemed to satisfy the ROD Finalization requirements of this ~~SA~~.

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- b. Temporary Shutdown of the CCMI.

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* i. In the event that contaminants not listed in Appendix 3 are detected in extracted groundwater, in area groundwater monitoring or extraction well locations, or in the event that concentration or equivalent mass levels for the contaminants listed in Appendix 2 are detected at the point of connection of DoN's SGU groundwater conveyance pipeline (see Appendix 5) or the CCMI PA or SGUVOC Treatment Plant intakes that exceed ECLs for those contaminants as set forth in Appendix 2, the Party discovering said contaminants or levels will promptly notify in writing the other Parties, the FFA signatories, California Department of Toxic Substances Control (DTSC), California Department of Health Services (DHS), and the Santa Ana Regional Water Quality Control Board (RWQCB), and OCWD/IRWD then may, without further notice, temporarily shut down operation for the CCMI in accordance with the following.

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ii. Within seven (7) calendar days following such initial notification, the Parties, the FFA signatories, and DHS will determine whether through adjusting flow rates, blending, or similar measures:

(a) The CCMI can continue to adequately treat extracted groundwater to ensure compliance with applicable Federal and State water quality standards at the point of distribution into the water supply infrastructure following treatment, or

(b) In the absence of Federal or State water quality standards, the continued supply of CCMI water poses no potential health threat to the public.

iii. If the standards in Paragraphs III.A.4.b.ii.(a) or (b) can be met, OCWD/IRWD will immediately resume operations; notify in writing DoN and the FFA signatories; and, if the operation of the CCMI must be permanently modified in any way that is inconsistent with the ROD or FFA deliverables (e.g., minimum flow rates), OCWD/IRWD must obtain DoN's and the FFA signatories' approval within ninety (90) calendar days.

✕ iv. In the event that OCWD/IRWD determine that the standards set forth in Paragraphs III.A.4.b.ii.(a) or (b) cannot be met, OCWD/IRWD may continue temporary shutdown of the CCMI and will develop and submit a Response Plan within sixty (60) calendar days for approval by DoN and concurrence by USEPA and CALEPA (including DTSC, DHS, and RWQCB). The Response Plan will propose all practicable means available to minimize the extent and duration of termination of all or a portion of the CCMI IDP groundwater extraction and/or treatment activities. The Response Plan also will specify a timetable for resumption of operations.

v. If the approved Response Plan under Paragraph III.A.4b.iv. provides that the CCMI will continue to operate but that additional treatment technology at the CCMI PA or SGU VOC treatment plant will be required beyond VOC treatment technologies, the United States will not be responsible for any costs associated with such additional treatment technology except as otherwise provided in this Agreement, including but not limited to the terms and conditions of Paragraph IV.B.6. and Paragraphs VII.B. and VII.C. of this Agreement.

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✕ vi. OCWD/IRWD will resume full operation of the CCMI groundwater extraction and/or treatment activities as provided in the approved Response Plan or, in the alternative, upon approval of resumption of operations by USEPA and DHS.

c. Permanent Termination of the CCMI.

✕ i. OCWD/IRWD will not permanently terminate operation of the CCMI unless it has demonstrated, and DoN has approved and USEPA and CALEPA (including DTSC, DHS, and RWQCB) have concurred in writing, either that a Force Majeur condition exists as set forth in Section 10 of the FFA (Appendix 1) or, in the

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alternative, that treatment of extracted groundwater to meet Federal and State drinking water quality standards and adequately protect human health and the environment is technically impracticable from an engineering perspective consistent with the substantive criteria set forth at 40 CFR Section 300.430(f)(1)(ii)(C)(3) and the NCP preamble at 55 Fed. Reg. 8748 (March 8, 1990). The availability to OCWD/IRWD of water from sources other than the PA and CCMI at a lower cost to OCWD/IRWD and its customers (taking into consideration groundwater treatment costs) will not be considered in evaluating technical impracticability.

ii. In the event of permanent termination of operations of the CCMI by OCWD/IRWD for any reason and a determination by the FFA signatories pursuant to the FFA that further active remediation of the PA by DoN is required; OCWD/IRWD will compensate the United States in accordance with Appendix 7. In the event of permanent termination of operations of the CCMI by OCWD/IRWD for any reason and a determination by the FFA signatories pursuant to the FFA that monitored natural attenuation is an appropriate remedial action for the PA and that further active remediation of the PA by DoN is not required, OCWD/IRWD will not compensate the United States in accordance with Appendix 7. OCWD/IRWD acknowledge that the ROD for OU1 and OU2A should provide that, based upon currently available information, it is anticipated that the backup, contingency remedial action for VOC contamination in the PA will consist of monitored natural attenuation in the event the CCMI is terminated for any reason.

iii. OCWD/IRWD will immediately notify in writing the Trustee of the Reversionary Trust established pursuant to Paragraph IV.B. of this Agreement of the permanent termination of the CCMI. In the event of such permanent termination,

OCWD/IRWD will not submit additional Reimbursement Requests to the Reversionary Trust Trustee as provided in Paragraph IV.B. and the Trustee will not reimburse OCWD/IRWD.

d. Any temporary shutdown or permanent termination that does not satisfy the terms of this Paragraph III.A.4. will constitute a breach of this Agreement.

e. The ROD will incorporate this Paragraph III.A.4.

by reference.

B. OCWD/IRWD Commitment To Accept and Treat SGU Groundwater.

1. As described herein, OCWD will enter into a contract (Appendix 8) to accept, take ownership of, and treat groundwater extracted by DoN from the SGU and delivered by DoN to OCWD/IRWD.

2. VOC Treatment Contract.

a. DoN, subject to the availability of funds, and OCWD will enter into a contract under which OCWD/IRWD will agree to provide uninterrupted VOC removal services for groundwater extracted by DoN from the former MCAS El Toro on-station SGU. OCWD will accept and take ownership of the groundwater extracted by DoN from the former MCAS El Toro on-station SGU and delivered by DoN to OCWD for VOC treatment pursuant to the terms and conditions of the contract and as provided in the ROD and FFA deliverables.

b. After treatment, OCWD will be responsible for the disposal and/or discharge of the SGU groundwater consistent with the ROD and applicable laws and regulations. After treatment, no costs associated with the disposal and/or discharge of the SGU groundwater will be a basis for recovery by OCWD/IRWD.

c. Payment for Services.

OCWD's services to be performed under the contract will be considered utility services. Payment for utility services will be made pursuant to terms and conditions of the contract.

3. Response to Additional Contamination.

The contract will include procedures and substantive criteria for addressing the appropriateness of temporary shutdown and permanent termination by OCWD of SGU treatment activities.

4. DoN may temporarily shut down operation of the SGU extraction system without prior notice to OCWD. Such shutdown may be for any reason deemed necessary by DoN. When such shutdown occurs, the Contracting Officer will provide OCWD with written notice of the shutdown and its anticipated duration as soon as reasonably practicable. Under no circumstances will such shutdown be grounds for recovery under the Changes Clause of the contract.

5. Permanent Termination Not Permitted Under Contract.

Subject to Paragraph III.B.6. below, permanent termination by OCWD of SGU VOC treatment activities required by the contract will be deemed a breach of the contract and this Settlement Agreement unless DoN is relieved of its obligation under the FFA and ROD to remediate VOC contamination in the SGU by an amendment to the ROD. In the event of a termination of services contrary to this provision, in addition to any other remedies covered by the contract, the United States will be entitled to recover from OCWD all costs incurred by DoN in obtaining alternate VOC remediation services over and above the amount to be paid to the contractor for the connection charge and service rate at the time the services are terminated pursuant to the contract payment schedule. In the event of such termination, the connection charge and service rate for the performance period in which the contract was breached as well as

all future connection charges and service rates as set forth in the contract will not be paid to OCWD.

6. Permanent Shutdown Permitted Under Contract.

Notwithstanding any other provision of the contract, a permanent shutdown will not be considered a breach of the contract if DoN is relieved of its obligation under the FFA and ROD to remediate VOC contamination in the SGU by an appropriate amendment of the ROD. If such shutdown occurs during the base contract (ten-year-period), OCWD will be paid the balance of the connection charge according to the contract, and the service rate will be reduced on a pro rata basis based on the volume of SGU groundwater accepted and treated during the performance period prior to the termination of services by DoN.

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C OCWD/IRWD Commitment for FFA Deliverables.

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1. Upon issuance and finalization of the ROD pursuant to the FFA, OCW/IRWD will prepare draft and draft final documents for all of the following documents that the FFA requires DoN to prepare after finalization of the ROD pursuant to the FFA. These documents shall address OCWD/IRWD assets of the CCMI.

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a. Primary document deliverables identified in Section 7.3 of the FFA:

- RD Work Plan
- RA Work Plan
- Preliminary Remedial Design
- Final Remedial Design
- Construction Quality Assurance Plan
- Construction Quality Control Plan

- Contingency Plan
- Project Closeout Reports
- Operation and Maintenance Plan

4. (b) Secondary document deliverables identified in
Section 7.4 of the FFA:

- Well Closure Methods and Procedures.

2. DoN will be responsible for preparing all other FFA documents.

3. The FFA documents identified above as OCWD/IRWD's responsibility shall adequately address USEPA and CALEPA comments on draft deliverable documents as provided in Section 7.7 of the FFA and shall be submitted to DoN in accordance with the schedule upon which DoN and OCWD/IRWD agree and in accordance with Section 8.2 of the FFA. OCWD/IRWD and DoN will cooperate to finalize the language of draft final deliverable documents in order to address all FFA requirements and address USEPA and CALEPA comments. OCWD/IRWD will submit these draft and draft final documents in a timely manner to allow DoN to review the document prior to submittal of the documents to USEPA and CALEPA as provided in the schedule developed and approved in accordance with Sections 7.7, 7.8, 7.9, 7.10, and 8.2 of the FFA. DoN will ensure that its comments are provided to OCWD/IRWD as early as reasonably possible to avoid delay in submittals. Any delay by OCWD/IRWD in providing these documents in a timely manner, which thereby causes delay by DoN in submitting the FFA deliverables to USEPA and CALEPA as provided under the FFA, will be considered a breach of this Agreement.

D. Performance Assurance.

Within sixty (60) calendar days of the date of CERCLA ROD finalization, OCWD/IRWD will establish and maintain financial security in the amount of the total estimated cost of the OCWD/IRWD Assets of the CCMI for the term of this Agreement less the amount then paid to OCWD/IRWD by the United States pursuant to this Agreement. This financial security will be in the form of a highly-rated performance bond guaranteeing performance of the OCWD/IRWD Assets of the CCMI. The bond will be presented to DoN and be subject to DoN approval.

E. Pollution Insurance.

Within one year of the date of CERCLA ROD finalization, OCWD/IRWD will obtain pollution insurance in the minimum amount of \$20,000,000 (or a lesser amount if agreed in writing among the parties) that reasonably covers risk concerning the CCMI, (except for risks associated with the SGU assets, which are addressed in the SGU contract), and OCWD/IRWD will maintain said insurance for forty years, unless commercially impracticable (with prior written notice of such asserted impracticability).

F. OCWD/IRWD Responsibility for Permits, Licenses, etc.

Except with regard to DoN's obligations as provided in the FFA, OCWD/IRWD will be responsible for obtaining all locally-issued licenses, permits, and approvals necessary for construction and operation of the CCMI, and will be the lead agency responsible for compliance with the California Environmental Quality Act, Public Resources Code sections 21000 et seq., as necessary to construct and operate the CCMI.

* IV. THE UNITED STATES' OBLIGATION TO REIMBURSE OCWD/IRWD FOR PAST AND FUTURE RESPONSE COSTS RELATING TO THE DESIGN, CONSTRUCTION, OPERATION, AND MAINTENANCE OF THE OCWD/IRWD ASSETS OF THE CCMI.

A. Payment by the United States.

→ As compensation for OCWD/IRWD's obligations under the preceding Paragraphs and to resolve potential liability to OCWD/IRWD for response costs, the United States agrees as follows:

1. The United States, on behalf of the SFA, will pay the agreed total amount of Fourteen Million Nine Hundred Eleven Thousand Dollars (\$14,911,000) into Facility and Operations & Maintenance Accounts in a Reversionary Trust established pursuant to IV.B. of this Settlement Agreement, as compensation for past and future response costs incurred and to be incurred by OCWD/IRWD relating to the OCWD/IRWD Assets of the CCMI that address PA contamination. This payment by the United States will be made within one hundred and eighty (180) calendar days following finalization of the ROD pursuant to the FFA.

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2. The United States, on behalf of the SFA, also will pay the agreed amount of Five Million Two Hundred Fifty Thousand Dollars (\$5,250,000) into a Contingency Fund Account in the Reversionary Trust established pursuant to Section IV.B. of this Settlement Agreement, as a settlement premium for purposes of resolving certain past, present, and future claims pertaining to or associated in any way with the actual or threatened release of hazardous, toxic or solid wastes, substances, pollutants, or contaminants (including but not limited to VOCs, TDS, and nitrates) at or from Former MCAS El Toro, the CCMI, or the Modified IDP as provided in Paragraphs VII.B. and VII.C. of this Agreement. This payment by the United States will be made within one hundred and eighty (180) calendar days following finalization of the ROD pursuant to the FFA. The eligible uses and eligible payments from this account are set forth more specifically in Paragraph IV.B below. (If CERCLA ROD finalization is not until July 2002, then the \$5,250,000 will be increased to \$5,792,000, with the amount of the incremental increase to be divided proportionally among the Contingency Fund Account components in IV.B.9.; if not until July 2003, then proportionally increased to \$6,351,000; if not until July 2004, then proportionally increased to \$6,926,000; if not until July 2005, then proportionally increased to \$7,518,000; and if

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CERCLA ROD finalization is not until July 2006 or beyond, then the amount will be renegotiated in good faith to account for escalation of costs.)

B. Reversionary Trust.

1. Within 90 days of funding, the United States will establish a Reversionary Trust to hold the funds described in Paragraphs IV.A.1. and 2. of this Settlement Agreement.

* 2. The Reversionary Trust will be created pursuant to a Trust Agreement between the United States, as grantor, and a suitable financial institution to be selected by the United States as Trustee. The Trustee will have the powers, duties, and responsibilities set forth in the Trust Agreement, including responsibility for maintaining financial and accounting records relating to the Trust and making payments in accordance with this Settlement Agreement to

* OCWD/IRWD.

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3. The Trust Agreement will provide for establishment and administration of three separate accounts: the "Facility Account," the "Operations & Maintenance Account," and the "Contingency Fund Account."

4. The Facility Account will be established in the amount of Seven Million Five Hundred Seventy Two Thousand Dollars (\$7,572,000) for purposes of reimbursing OCWD/IRWD for initial capital construction expenditures for off-station components of the CCMI that address PA contamination and serving as the exclusive source of Trust funds for reimbursement of such expenditures.

5. The Operations & Maintenance Account will be established in the amount of Seven Million Three Hundred Thirty Nine Thousand Dollars (\$7,339,000) for purposes of reimbursing OCWD/IRWD for operations and maintenance expenditures for the off-station

components of the CCMI that address PA contamination and serving as the exclusive source of Trust funds for reimbursement of such expenditures.

6. The Contingency Fund Account will be established in the amount of Five Million Two Hundred Fifty Thousand Dollars (\$5,250,000). The Contingency Fund Account will be used for phased payment as provided below in Paragraphs IV.B.9.(a) and (b). The schedule for payment is structured to provide larger payments to OCWD/IRWD within the first ten years of operation of this Agreement to more adequately address risk relating to PA groundwater extracted from Modified IDP off-station groundwater extraction wells, repair and replacement, and other contingencies relating to the Modified IDP. (See also IV.A.2.)

7. General Procedures for Payment of Reimbursement and Payment Requests From Reversionary Trust Funds.

Any request for reimbursement or payment from Reversionary Trust funds will be submitted by OCWD/IRWD to the Trustee, with copies to the United States Department of Justice (DoJ) and DoN, and will specify the account under which reimbursement is being sought and the specific basis for payment. The Trustee will pay the request unless the United States submits written objection to the request for reimbursement within thirty (30) calendar days of the United States' receipt of the request. Absent objection from the United States, the Trustee will pay the reimbursement within sixty (60) calendar days of receipt of the request for reimbursement. The Trustee will review all requests to ensure compliance with this Settlement Agreement. If the United States submits written objection to payment within thirty (30) calendar days of receipt of the request for reimbursement as provided above, OCWD/IRWD may invoke the dispute resolution procedures by providing written objection as provided in Paragraph VII.F. of this Agreement. In the event of such dispute, the Trustee will withhold reimbursement to

OCWD/IRWD. In the event that OCWD/IRWD prevails in such dispute, they will be entitled to prompt payment following the final dispute resolution decision.

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8. Specific Procedures and Criteria for Requests for Reimbursement and Payment From Facility Account and Operations & Maintenance Account.

Requests for reimbursement will be submitted by OCWD/IRWD to the Trustee, with copies to the United States (DoJ and DoN) and, subject to Paragraph IV.B.7., will be paid by the Trustee, commencing three months after establishment of the Trust or one year after ROD finalization (whichever occurs earlier), and then in accordance with and consistent with the Facility Payment and Operations & Maintenance Payment schedules set forth in Appendix 6, which is hereby incorporated by reference into this Agreement.

9. Specific Procedures and Criteria for Requests for Reimbursement and Payment From Contingency Fund Account.

There are two types of payments from the Contingency Fund Account: 1) Installment Payments which are addressed in Paragraph IV.B.9.a. below and 2) Conditional Payments which are addressed in Paragraphs IV.B.9.b. and c. below. The Installment Payments are payments of fixed amounts in three increments spaced ten years apart beginning approximately one year after ROD finalization. The Conditional Payments are reimbursements of certain additional specified costs that OCWD/IRWD might incur and are subject to maximum dollar amounts during three consecutive periods. Requests for Contingency Fund Account Payments will be submitted by OCWD/IRWD to the Trustee, with copies to the United States (DoJ and DoN), and will conform to the following eligibility criteria and limitations and, subject to Paragraph IV.B.7., will be paid by the Trustee in accordance with the schedules for payment set forth below. (See also IV.A.2.)

→ a. Installment Payment Eligibility Criteria and Payment Schedule.

The Trustee will pay Installment Payments from the Contingency Fund Account to OCWD/IRWD in the following amounts on the following schedule upon receipt of OCWD/IRWD's advance request for payment:

- i. One Million Five Hundred Thousand Dollars (1,500,000) on or about one year after ROD finalization, and
- ii. One Million Dollars (\$1,000,000) on or about eleven years after ROD finalization, and
- iii. One Million Dollars (\$1,000,000) on or about twenty-one years after ROD finalization.

b. Conditional Payment Maximum Total Dollar Amounts.

OCWD/IRWD may request that the Trustee pay Conditional Payments from the Contingency Fund Account for eligible costs under Paragraph IV.B.9.c. in amounts not to exceed the following maximum total dollar amounts for the following time periods:

- i. A maximum total dollar amount not to exceed One Million Seven Hundred Fifty Thousand Dollars (\$1,750,000) during the time period beginning upon one year after ROD finalization and ending not later than eleven years after that ROD date.
- ii. A maximum total dollar amount not to exceed One Million Dollars (\$1,000,000) during the time period beginning upon eleven years after ROD finalization and ending not later than twenty-one years after that ROD date.
- iii. A maximum total dollar amount not to exceed One Million Dollars (\$1,000,000) during the time period beginning upon twenty-one years after ROD finalization and ending not later than forty years after that ROD date.

c. Conditional Payment Eligibility Criteria.

The following categories of contingency costs will be eligible for reimbursement by Conditional Payments from the Contingency Fund Account, subject to the maximum total dollar amounts set forth in Paragraph IV.B.9.b., above:

i. Deductible payments that are related to:

a. Claims filed against OCWD/IRWD by entities other than OCWD/IRWD or the United States relating to releases of hazardous substances, pollutants, or contaminants attributable to DoN activities from facilities owned or operated by DoN at the former MCAS El Toro location, or

b. CERCLA response costs, which are necessary and consistent with the NCP, which are incurred by OCWD/IRWD at the off-station PA components of the Modified IDP as a result of the release of hazardous substances, pollutants, or contaminants attributable to DoN activities from facilities owned or operated by DoN at the former MCAS El Toro location that are detected in and extracted from the PA by off-station groundwater wells, and which address the following new or previously unknown conditions or information:

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1. Hazardous substances, pollutants, or contaminants that do not appear on the list of chemicals in Appendix 3 to this Settlement Agreement and that are identified after the effective date of this Agreement;

2. Concentration levels of hazardous substances, pollutants or contaminants exceeding the ECL values for the CCMI PA VOC Treatment Plant intake set forth in Appendix 2 to this Settlement Agreement that are identified in monitoring data collected and analyzed at the CCMI PA VOC Treatment Plant intake after the date of finalization of the ROD; or

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3. Legally enforceable Federal or State water quality standards that address hazardous substances, pollutants or contaminants included in the list in Appendix 2 to this Settlement Agreement and that are more stringent than those in effect as of the effective date of this Agreement.

ii. CCMI Repair/Replacement costs for unanticipated breakdowns that have not been covered by Operations & Maintenance Account payments and that are above and beyond ordinary and necessary maintenance and repair for the following:

a. CCMI PA VOC Treatment Plant (100% cost reimbursable), or

b. CCMI extraction wells, pumps, and pipelines from off-station PA extraction wells to the CCMI PA VOC Treatment Plant (100% cost reimbursable).

iii. pollution insurance.

iv. new groundwater monitoring wells.

v. escalated construction and/or operating costs, due to a ROD finalization after July 2002.

10. All funds remaining in the Reversionary Trust after forty years of operation and maintenance of the CCMI will revert expeditiously to the United States Treasury.

11. In the event of a permanent termination of the CCMI under Paragraph III.A.4.C. or breach of this Settlement Agreement, all funds remaining in the Reversionary Trust will revert expeditiously to the United States Treasury.

12. If the ROD is amended and the amendment is finalized pursuant to the FFA so that VOC treatment of PA groundwater is no longer required under the amended ROD, the obligation of the United States to reimburse OCWD/IRWD under this Agreement will be

terminated. Under such circumstances, the United States will notify the Trustee, who will make no further payments to OCWD/IRWD from the Reversionary Trust, and OCWD/IRWD will make no further requests for reimbursement. All funds then remaining in the Reversionary Trust will revert expeditiously to the United States Treasury.

V. OBLIGATION OF DoN AND OCWD/IRWD TO SEEK APPROVAL OF THE ROD.

A. DoN will use its best efforts to draft and obtain USEPA and CALEPA concurrence as to the ROD as well as finalization of the ROD pursuant to the FFA as soon as reasonably possible, consistent with the FFA schedule and any amendments thereto.

B. OCWD/IRWD will assist and support DoN in proposing and submitting to USEPA and CALEPA as provided under the FFA a Draft and Draft Final Proposed Plan and ROD for OU1 and OU2A based upon Alternative 8A as the remedial action for the PA and Alternative 10B^{10B} as the remedial action for the SGU, respectively. Based upon currently available information, it is anticipated that the "back-up" contingency remedial action for VOC contamination in the PA will consist of monitored natural attenuation in the event that the CCMI is permanently terminated for any reason.

C. DoN will provide OCWD/IRWD with reasonable advance notice and an opportunity to participate in any meetings or telephone conferences with USEPA and CALEPA, subject to the concurrence of USEPA and CALEPA, in support of DoN's efforts to obtain approval of the ROD; provided, however, that such meeting or telephone conference has not been scheduled to discuss legally privileged matters within the scope of the attorney-client communication, attorney work product, or deliberative process privileges.

D. DoN will provide OCWD/IRWD with reasonable advance notice and opportunity to review and comment on drafts of all documents pertaining to efforts to gain approval of the

ROD except for legally privileged matters within the scope of the attorney-client communication, attorney work product, or deliberative process privileges.

E. OCWD/IRWD will provide DoN with reasonable advance notice and an opportunity to participate in any meetings or telephone conferences addressing non-privileged matters (not within the scope of the attorney-client communication, attorney work product, or deliberative process privileges) between OCWD and IRWD on the CCMI.

F. OCWD/IRWD will provide DoN with reasonable advance notice and opportunity to review and comment on all drafts of documents pertaining to efforts to gain approval of the ROD.

G. DoN will give OCWD and IRWD notice of final and complete concurrence by USEPA and CALEPA upon the ROD or finalization of the ROD pursuant to the FFA.

VI. ACCESS FOR CONSTRUCTION, OPERATION AND MAINTENANCE, AND MONITORING PURPOSES

A. At no cost to OCWD or IRWD, the United States will provide OCWD/IRWD with reasonable access to the Site so long as the United States owns the Site and to any DoN-owned or controlled property as necessary for OCWD/IRWD to design, construct, and operate and maintain the CCMI including, without limitation, necessary rights-of-way or easements for the construction, operation and maintenance of the CCMI. In the event the United States sells or leases the Station, the United States will reserve and record in such sale or lease agreement at no cost to OCWD or IRWD, continuing access, rights-of-way licenses and easements as necessary for OCWD/IRWD to construct, operate and maintain the CCMI. The United States will inform all prospective purchasers and lessees that a CERCLA remedial action will be operating pursuant to a ROD with USEPA and CALEPA and that OCWD/IRWD will have the right, upon

reasonable notice and so as not to unreasonably interfere with the purchaser's or lessee's operations, to take soil samples on the Station, with the purpose of confirming that no current operations have resulted in the release of hazardous substances that could impact the treatment system.

B. During the term of this Settlement Agreement, OCWD/IRWD will provide DoN, USEPA, and CALEPA with reasonable access, during normal business hours, to the CCMI facilities and to all records that are not within the scope of the attorney-client communication, attorney work product, or deliberative process privileges and that are relevant to the construction and operation and maintenance of those facilities, for purposes of evaluating OCWD's and IRWD's compliance with this Settlement Agreement. OCWD/IRWD also will provide DoN, USEPA, and CALEPA with reasonable access, during normal business hours, to sample pre-treated and treated groundwater, and groundwater collected in groundwater monitoring wells.

C. DoN will provide OCWD and IRWD with a copy of analytical data reports for all validated analytical data collected by DoN and its authorized representatives and contractors in groundwater monitoring wells and on-station extraction wells required by the ROD, within sixty (60) calendar days after such reports become available to DoN.

D. OCWD and IRWD will provide DoN with copies, of analytical data reports for all analytical data collected by OCWD and IRWD in groundwater monitoring wells and CCMI production wells, within sixty (60) days after such reports become available to OCWD and IRWD.

E. In the event that monitoring activities undertaken pursuant to this Settlement Agreement cause damage to one or more of the monitoring or production wells or create a condition in a well that prevents the future intended use of the well within the scope of this

Agreement (e.g., equipment lodged), then the entity responsible for causing the damage or creating said condition will promptly remedy the condition at its sole cost to ensure that the intended use of the well satisfies all applicable federal, state and local regulatory operation, maintenance, quality assurance/quality control, and safety standards.

F. In the event that monitoring or sampling equipment used by any party to this Settlement Agreement at a monitoring or production well that is the subject of this Agreement is lost or damaged during well monitoring activities by one of the parties, then it will be the responsibility of the party that owns the equipment to retrieve and/or repair its own equipment.

VII. OTHER PROVISIONS.

A. Ownership of CCMI

OCWD and IRWD will own and hold sole and exclusive title to the CCMI
OCWD/IRWD Assets described in Recital P and Appendix 4.

B. Release and Covenant Not To Sue.

1. In consideration of the terms and conditions set forth in this Agreement, and contingent upon the United States' full and final payment of the sums specified in Paragraphs IV.A.1. and IV.A.2. into the Reversionary Trust as specified above, OCWD/IRWD hereby expressly and intentionally, forever and fully releases, discharges, and covenants not to sue the United States, or its past and present officers, employees, agents, contractors, and successors, with respect to any past, present, or future claims pertaining to or associated in any way with the actual or threatened release of hazardous, toxic or solid wastes, substances, pollutants, or contaminants (including but not limited to VOCs, TDS, and nitrates) at or from Former MCAS El Toro, the CCMI, the Modified IDP, or the PA.

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Appendix 4

Primary Components of Modified Irvine Desalter Project

The Modified Irvine Desalter Project (IDP) is comprised of both a Potable Water System (Potable System) and a Non-potable Water System (Non-Potable System); each is an entirely separate groundwater extraction, conveyance, treatment and delivery/discharge system.

None of the assets of the Potable System are included in, associated with, or related to the MCAS El Toro groundwater CERCLA actions. Certain specified assets of the Non-potable System are also not associated with or related to the MCAS El Toro groundwater CERCLA actions (see below).

Each system is designated by color(s) on the Appendix 5 map, the Potable System in blue and the Non-Potable System in red.

The Primary Components of the Modified IDP are as follows:

1. CERCLA Component of the Modified IDP (CCMI).

The CCMI consists of the following OCWD/IRWD and DON assets of the Non-Potable System (see Whereas Clause P of the Recitals):

a. OCWD/IRWD Assets (to be owned/operated by OCWD/IRWD, with response costs to be reimbursed by the United States pursuant to this Agreement):

1. Non-Potable System Principal Aquifer (PA) VOC treatment plant (including air strippers and off-gas granular-activated carbon units) for VOC-contaminated groundwater extracted from PA groundwater.
2. Non-Potable System Shallow Groundwater Unit (SGU) VOC treatment plant (including air strippers and off-gas granular-activated carbon units) for VOC-contaminated groundwater extracted from SGU groundwater.
3. Non-Potable System PA and SGU treatment plant sites' real property, buildings, site improvements, telemetry, transformers and other electrical improvements, and monitoring and control systems.
4. Extraction Wells IRWD-78, ET-1, and ET-2, and Injection Well IDP-1.
5. Pumping and pipeline conveyance system from Wells IRWD-78, ET-1, and ET-2 to the Non-Potable System PA VOC treatment plant (reference red line on Appendix 5 map).

6. Pumping and pipeline conveyance system from the Non-Potable System SGU VOC treatment plant to Injection Well IDP-1 and to connection to the brine line (reference red line on Appendix 5 map).

7. Monitoring Wells IDP-2, IDP-3, and IDP-4.

b. DON Assets (to be designed, constructed, owned/operated and paid by DON):

1. DON's extraction wells for interception and removal of VOC-contaminated groundwater in the SGU.

2. DON's SGU pumps, tank, site improvements, telemetry, transformers and other electrical improvements, and monitoring and control systems (including data link).

3. DON's pumping and pipeline conveyance from those SGU extraction wells to the DON SGU plant and from the DON SGU plant to the pipeline conveyance system's point of connection at the former MCAS El Toro station boundary.

4. DON's monitoring wells associated with the remediation of the VOC plume in the SGU and PA.

2. Non-CERCLA Component of the Modified IDP (non-CCMD).

The following Potable System and Non-Potable System assets of the Modified IDP are non-CERCLA.

a. The entire Potable System of the Modified IDP including:

1. Potable System water treatment plant for groundwater extracted from outside and cross gradient of the VOC contaminant plume in the PA.

2. Potable System water treatment plant site's real property, buildings, site improvements, telemetry, transformers and other electrical improvements, and monitoring and control systems.

3. Extraction Wells including but not limited to IRWD-110, TIC-107, IRWD-76, and IRWD-77 located outside and cross gradient of the VOC plume in the PA.

4. Pumping and pipeline conveyance system from the extraction wells located outside and cross gradient of the VOC plume in the PA to the Potable System water treatment plant.

5. Potable System desalination treatment assets (including pre-filters, chemical feed units, pumps, reverse osmosis units, de-gassifiers, and controls) and peripheral facilities that include product water delivery/discharge system pumps and pipelines, and brine disposal.

6. Monitoring wells associated with the operation and performance of the Potable System.

b. Any Non-Potable System desalination treatment assets (including pre-filters, chemical feed units, pumps, reverse osmosis units, de-gassifiers, and controls) and peripheral facilities that include product water delivery/discharge system pumps and pipelines, and brine disposal.

Attachment C

Updated Descriptions of the Modified IDP

Primary Components of Modified Irvine Desalter Project

The Modified Irvine Desalter Project (IDP) is comprised of both a Potable Water System (Potable System) and a Non-potable Water System (Non-Potable System); each is an entirely separate groundwater extraction, conveyance, treatment and delivery/discharge system.

None of the assets of the Potable System are included in, associated with, or related to the MCAS El Toro groundwater CERCLA actions. Certain specified assets of the Non-potable System are also not associated with or related to the MCAS El Toro groundwater CERCLA actions (see below).

Each system is designated by color(s) on Figure 4-1, the Potable System in blue and the Non-Potable System in red.

The Primary Components of the Modified IDP are as follows:

1. CERCLA Component of the Modified IDP (CCMI).

The CCMI consists of the following OCWD/IRWD and DON assets of the Non-Potable System:

a. OCWD/IRWD Assets (to be owned/operated by OCWD/IRWD, with response costs to be reimbursed by the United States pursuant to the Settlement Agreement):

1. Non-Potable System Principal Aquifer (PA) VOC treatment plant (including air strippers and off-gas granular-activated carbon units) for VOC-contaminated groundwater extracted from PA groundwater.

2. Non-Potable System Shallow Groundwater Unit (SGU) VOC treatment plant (including air strippers and off-gas granular-activated carbon units) for VOC-contaminated groundwater extracted from SGU groundwater.

3. Non-Potable System PA and SGU treatment plant sites' real property, buildings, site improvements, telemetry, transformers and other electrical improvements, and monitoring and control systems.

4. Extraction Wells IRWD-78, ET-1, and ET-2, and Injection Well IDP-1.

5. Pumping and pipeline conveyance system from Wells IRWD-78, ET-1, and ET-2 to the Non-Potable System PA VOC treatment plant (reference red line on Figure 4-1).

6. Pumping and pipeline conveyance system from the Non-Potable System SGU VOC treatment plant to Injection Well IDP-1 and to connection to the brine line (reference red line on Figure 4-1).

7. Monitoring Wells IDP-2, IDP-3, and IDP-4.

b. DON Assets (to be designed, constructed, owned/operated and paid by DON):

1. DON's extraction wells for interception and removal of VOC-contaminated groundwater in the SGU.

2. DON's SGU pumps, tank, site improvements, telemetry, transformers and other electrical improvements, and monitoring and control systems (including data link).

3. DON's pumping and pipeline conveyance from those SGU extraction wells to the DON SGU plant and from the DON SGU plant to the pipeline conveyance system's point of connection at the former MCAS El Toro station boundary.

4. DON's monitoring wells associated with the remediation of the VOC plume in the SGU and PA.

2. Non-CERCLA Component of the Modified IDP (non-CCMI).

The following Potable System and Non-Potable System assets of the Modified IDP are non-CERCLA.

a. The entire Potable System of the Modified IDP including:

1. Potable System water treatment plant for groundwater extracted from outside and cross gradient of the VOC contaminant plume in the PA.

2. Potable System water treatment plant site's real property, buildings, site improvements, telemetry, transformers and other electrical improvements, and monitoring and control systems.

3. Extraction Wells including but not limited to IRWD-110, TIC-107, IRWD-76, and IRWD-77 located outside and cross gradient of the VOC plume in the PA.

4. Pumping and pipeline conveyance system from the extraction wells located outside and cross gradient of the VOC plume in the PA to the Potable System water treatment plant.

5. Potable System desalination treatment assets (including pre-filters, chemical feed units, pumps, reverse osmosis units, de-gassifiers, and controls) and peripheral facilities that include product water delivery/discharge system pumps and pipelines, and brine disposal.

6. Monitoring wells associated with the operation and performance of the Potable System.

b. Any Non-Potable System desalination treatment assets (including pre-filters, chemical feed units, pumps, reverse osmosis units, de-gassifiers, and controls) and peripheral facilities that include product water delivery/discharge system pumps and pipelines, and brine disposal.